

BEERELLI SESHI, M.D.**CURRICULUM VITAE**

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Date of Birth: August 5, 1950

Place of Birth: Epoor, Andhra Pradesh, India

Immigration Status: U.S. Permanent Resident

Social Security #: 362-88-7280

University Education:

	Institution	Degree	Years
Premedical:	New Science College Hyderabad, India	P.U.C.	1968-1970
Medical School/ Clinical Internship:	Osmania Medical College/ Osmania General Hospital Osmania University Hyderabad, India	M.B.B.S.	1970-1977
Graduate School:	Department of Biochemistry Indian Institute of Science Bangalore, India	Certificate	1977-1980
Awards & Honors:	Recipient of Special Merit Scholarship in Medical School Recipient of University Gold Medal for First in Medicine		

Professional Training in the United States of America:

	Institution	Type	Years
Research:	Department of Immunology and Microbiology Wayne State University School of Medicine Detroit, MI	Immunology Research Associate	9/80-8/81
	Department of Pathology and Laboratory Medicine University of Nebraska Medical Center Omaha, NE	Immunology Research Associate	9/81-7/82
	Division of Laboratory Medicine Washington University School of Medicine St. Louis, MO	Immunology Research Associate	9/82-6/84
Residency:	Yale-New Haven Hospital Yale University New Haven, CT	Anatomic Pathology & Clinical Pathology	7/84-6/88
Fellowship:	University of Iowa Hospitals and Clinics Iowa City, IA	Immunopathology	7/88-11/89

U.S. Qualifying/Licensing Examinations:

ECFMG Examination	1/1982
Federation Licensing Examination (FLEX)	6/1982
Visa Qualifying Examination (VQE)	9/1982

Medical Licensures:

State	Number	Date issued	Status
California	A-79526	June 19 th 2002	Active
Florida	ME-0076083	23 rd June 1998	Inactive
New York	199006	18 th April 1995	Inactive
Iowa	26698	25 th July 1988	Inactive
Wyoming	4047A	1 st June 1987	Inactive

New York State Department of Health Certificate of Qualification:

Qualified to act as a Laboratory Director
in Hematology and Cellular Immunology

11/'95-11/'97

Board Certifications:

American Board of Anatomic and Clinical Pathology (AP/CP) 5/1988
Special Qualification in Immunopathology (IP) 9/1989

Professional Experience:

Madigan Army Medical Center Tacoma, WA	Staff Pathologist and Medical Director of Hematopathology & Flow Cytometry	12/89-7/90
University of Rochester School of Medicine and Dentistry Strong Memorial Hospital Rochester, NY	Assistant Professor of Pathology and Laboratory Medicine, and Assistant Director of Hematology Laboratory unit	8/90-8/96
	Director of Flow Cytometry Laboratory Medicine Division	1/93-8/96
H. Lee Moffitt Cancer Center & Research Institute University of South Florida Tampa, FL	Associate Professor of Pathology Attending Hematopathologist Director of Molecular Pathology	8/96-8/00 8/96-8/99
	Associate Professor of Pathology & Oncology Attending Hematopathologist	8/00-3/02
Harbor-UCLA Medical Center Department of Pathology, Torrance, CA	Head, Hematopathology Attending Hematopathologist	7/02-Present
UCLA School of Medicine	Associate Professor	7/02-Present

Memberships in Academic Professional Organizations:

Fellow, College of American Pathologists (FCAP)	1989-Present
Fellow, American Society of Clinical Pathologists (ASCP)	1989-Present
Member, American Society of Hematology (ASH)	1992-Present
Charter Member, Clinical Cytometry Society	1993-Present
Member, the Association of Biomolecular Resource Facilities (ABRF)	2000-Present

Activities in Professional Organizations:

Member, the American Society of Hematology (ASH) Standing
Committee on Clinical Laboratory Hematology 1993-1996
Consultant in Flow Cytometry for Eastern Cooperative Oncology Group
(ECOG); site visit of Immunophenotyping Laboratory of Montefiore
Medical Center/Albert Einstein Medical Center, Bronx, NY 1993

Journal Peer Review:

Blood
American Journal of Hematology
Journal of Histochemistry and Cytochemistry
Leukemia Research, BioTechniques, Cancer Control
Clinica Chimica Acta

Research Funding:**Current Research Support:*****NIH R29 FIRST Grant:***

Title: Function and Structure of Novel Human Bone Marrow CAMs
P.I.: Seshi, B
Project Period: August 1, 1997-July 31, 2002
Direct Costs: \$70,000 per year for five years

(About two years of funding remaining; requested no-cost extension through 7/31/04.)

NIH R21/R33 Grant:

Title: Functional Proteomics of Leukemic Marrow Stromal Cells
P.I.: Seshi, B
Project Period: July 01, 2002-June 30, 2006
Direct Costs: R21 1st Year \$100K; R21 2nd Year \$100K;
R33 1st Year \$500K; R33 2nd Year \$500K

Previous Research Support:

NIH Biomedical Research Support Grant (BRSG) awarded by the University of Rochester School of Medicine and Dentistry.

Title: A study of hematopoietic progenitor cell-binding proteins by cell blotting
P.I.: Seshi, B
Project Period: January 1, 1991-December 31, 1991
Annual Direct Costs: \$6,500

Institutional American Cancer Society (ACS) Award from the University of Rochester Cancer Center.

Title: Leukemic blast cell binding proteins by cell blotting
P.I.: Seshi, B.
Project Period: January 1, 1991-December 31, 1991
Annual Direct Costs: \$4,000

NIH Biomedical Research Support Grant (BRSG) awarded by the University of Rochester School of Medicine and Dentistry.

Title: Microsequencing of a set of novel hematopoietic cell adhesion proteins from human bone marrow
P.I.: Seshi, B
Project Period: January 1, 1994 - September 30, 1994
Annual Direct Costs: \$3,500

Patent Awarded:

Seshi B (Inventor). Bone marrow cell adhesion molecules and process for detecting adherence between cell adhesion molecules and cells generally (Invention). U.S. Patent Number: 5,521,067. Date of Patent: May 28, 1996 (*featured as front-page story in Gannett Rochester daily newspapers, December 13, 1995*). For patented technology transfer from University of Rochester, see (<http://www.rochester.edu/ott/technology/ses2dblt.htm>).

Presentations/ Invited Lectures:

The 7th Dr. Devaraju Krishnamurthi Memorial Oration at the Nizam's Institute of Medical Sciences, Hyderabad, India, July 17, 1998, on "Novel human bone marrow stromal cell adhesion molecules (CAMs) and their role in normal and leukemic hematopoiesis".

A National Cancer Institute Workshop, "Hematologic Malignancies and the Bone Marrow Microenvironment" September 23-25, 2002 in Rockville, Maryland.

BEERELLI SESHI, M.D.**BIBLIOGRAPHY****Scientific Articles Published:**

1. Seshi B (1979). Model for the generation of T-cell receptors. *Curr Sci* 48:919-920.
2. Seshi B (1979). X anti-n bodies: A nomenclature for anti-antibodies. *J Ind Inst Sci* 61(c):21-23.
3. Seshi B (1982). The dual recognition systems of T lymphocytes: A model. *J Theor Biol* 99:827-830.
4. Seshi B, Volsky B, Anderson R, Purtilo DT, Volsky D (1984). Infection of normal human thymic epithelial cells by Epstein-Barr virus (EBV) following implantation of EBV receptors. *Thymus* 6:5-13.
5. Seshi B (1985). Two cases of AIDS with florid *Mycobacterium avium-intracellulare* infection in the T cell areas of the spleen. *Human Pathol* 16:964-965.
6. Seshi B, Bell CE (1985). Preparation and characterization of monoclonal antibodies to human neuron-specific enolase. *Hybridoma* 4:13-25.
7. Seshi B (1986). Cell Blotting: Techniques for staining and microscopical examination of cells blotted on nitrocellulose paper. *Anal Biochem* 157:331-342.
8. Sasaki CT, Ruiz R, Gaito R, Kirchner JA, Seshi B (1987). Hunter's syndrome: A study in airway obstruction. *Laryngoscope* 97:280-285.
9. Frikke MJ, Seshi B, Bell CE (1987). Monoclonal antibodies to human neuron-specific enolase reveal heterogeneity of the enzyme in neurons of the central nervous system. *Brain Research* 417:283-292.
10. Seshi B (1988). Cell blotting on S&S NC nitrocellulose membranes. *Sequences* 27:1-2.
11. Seshi B, True L, Carter D, Rosai J (1988). Immunohistochemical characterization of a set of monoclonal antibodies to human neuron-specific enolase (featured on front cover). *Amer J Pathol* 131:258-269.
12. Seshi B, Kashyap A, Bennett JM (1992). Acute myeloid leukemia with an unusual phenotype: Myeloperoxidase (+), CD13 (-), CD14 (-) and CD33 (-). *British J Haematology* 81: 374-377. This is the first published case of this disease entity as acknowledged in Am J Clin Pathol 1997, 107, 68-73; Am J Clin Pathol 2000, 114, 29-34.
13. Woodlock TJ, Seshi B, Sham RL, Cyran EM, Bennett JM (1994). Use of cell surface antigen phenotype in guiding therapeutic decisions in chronic myelomonocytic leukemia. *Leukemia Research* 18:173-181.

14. **Seshi B** (1994). Discovery of novel hematopoietic cell adhesion molecules from human bone marrow stromal cell membrane protein extracts by a new cell-blotting technique. *Blood* 83: 2399-2409.
15. **Seshi B** (1994). Cell adhesion to proteins separated by lithium dodecyl sulfate-polyacrylamide gel electrophoresis and blotted onto a polyvinylidene difluoride membrane: A new cell-blotting technique. *J Immunol Methods* 176: No. 2, 185-201.
16. Gummuluru S, Novembre FJ, **Seshi B**, Dewhurst S (1995). Simian immunodeficiency virus, SIV_{smmPBj14}, induces expression of the $\alpha^E\beta 7$ integrin on simian lymphocytes. *Virology* 215: 97-100.
17. Chakravarti B, Chakravarti BN, Devecis J, **Seshi B**, Abraham, GN (1998). Effect of age on mitogen induced protein tyrosine phosphorylation in human T cell and its subsets: Down-regulation of tyrosine phosphorylation of ZAP-70. *Mechanisms of Aging and Development* 104(1):41-58.
18. **Seshi B**, Kumar S, Sellers D (2000). Human bone marrow stromal cell: Coexpression of markers specific for multiple mesenchymal cell lineages. *Blood Cells Mol Dis* Jun;26(3):234-246. URL: www.elsevier.com/locate/ybcmd.
19. **Seshi B**, Kumar S, King D (2003). Multilineage gene expression in human bone marrow stromal cells as evidenced by single-cell microarray analysis. *Blood Cells Mol Dis* 31(2): 268-285. URL: www.elsevier.com/locate/ybcmd. This is the first report of application of Affymetrix microarray analysis at single cell level.
20. **Seshi B** (2004). Proteomics knocks on Hematology's door (invited article). *Blood* (in press).

Book Chapters, Reviews:

1. **Seshi B**, Purtilo DT (1984). Humoral immune responses in parasitized, malnourished children (featured on front cover). In *Nutrition, Disease Resistance and Immune Function* (Ed. R.R. Watson). Marcel Dekker, Inc., New York, pp. 71-86.
2. Purtilo D, Harada S, Bechtold T, Yetz J, Rogers G, **Seshi B** (1984). Immunoregulatory defects and Epstein-Barr virus-associated lymphoid disorders. In *Pathogenesis of Leukemias and Lymphomas: Environmental Influences* (Ed. I.T. Magrath, G.T. O'Connor, B. Ramot). Raven Press, New York, pp. 235-257.
3. Gocken J, **Seshi B** (1990). Antineutrophil cytoplasmic antibodies. *ASCP Immunopathology Check Sample*, IP 90-1: pp. 1-11. Chicago, Ill: American Society of Clinical Pathologists.

Abstracts, Letters:

1. **Seshi B** (1980). Hypothesis of thymic induction. Fourth International Congress of Immunology, Paris, Abstract 3.1.32.

2. **Seshi B** (1981). Fully blind review. *Nature* 293:180.
3. **Seshi B**, Anderson R, Purtilo DT (1982). Induction of T cell differentiation by thymopoietin (TP5) as assessed by OKT monoclonal antibodies. FASEB, New Orleans, Abstract No. 867.
4. **Seshi B**, Phadnis SH, Shamala N (1983). Indian institute idea. *Nature* 306:310.
5. **Seshi B**, Bell CE (1984). Generation of monoclonal antibodies against human neuron-specific enolase. Third Annual Congress of Hybridoma Research, San Diego, Abstract, *Hybridoma* 3:99.
6. **Seshi B**, Carter D, Rosai J (1986). Monoclonal antibodies show human gamma-enolase to be a highly specific marker for neural differentiation in tumors. Abstract, First I.U.I.S. Conference on Clinical Immunology, Toronto, Canada.
7. **Seshi B**, True L, Carter D, Rosai J (1987). Selective localization of neuron-specific enolase (NSE) in normal and neoplastic neural tissues demonstrated with a set of monoclonal antibodies. Abstract No. 421, 76th Annual Meeting of International Academy of Pathology, U.S.-Canadian Division, Chicago, *Lab Invest* 56 :71A.
8. Goeken J, Kemp J, Bonsib S, **Seshi B** (1989). Clinicopathologic correlation of anti-neutrophil cytoplasm antibody (ANCA) and systemic vasculitis (SV) or glomerulonephritis (GN). 4th Annual Conference of Clinical Immunology Society (CIS), Arlington, VA, Abstract # 52.
9. di Sant'Agnese PA, Abrahamsson PA, de Mesy Jensen K, **Seshi B** (1993). Neuroendocrine differentiation in prostatic carcinoma evaluated by multiple antibodies to neuron-specific enolase. Annual Meeting of International Academy of Pathology, U.S.-Canadian Division, New Orleans, *Lab Invest* 68:58A.
10. **Seshi B** (1992). Hematopoietic cell adhesion to CHAPS, a bile acid derivative, immobilized on plastic. The American Society of Hematology (ASH) 34th Annual Meeting, Anaheim, CA, December 4-8, 1992, *Blood* (supplement 1) 80:406a.
11. **Seshi B** (1993). Discovery of multiple new hematopoietic cell adhesion molecules from human bone marrow stromal cell membrane protein extracts by a novel cell blotting technique. The American Society of Hematology (ASH) 35th Annual Meeting, St. Louis, MO, December 3-7, 1993, *Blood* (supplement 1) 82:20a.
12. **Seshi B** (1995). Patterns of progenitor cell adhesion to novel bone marrow stromal CAMs using 2-D cell blotting demonstrate complex adhesive interactions. Annual Meeting of the American Society of Hematology, Seattle, WA, December 1-5, 1995, *Blood* (supplement 1) 86: 309a.
13. **Seshi B** (1997). A case for selective postmortem analysis (SPA). *AJCP Pathology Patterns* (supplement 1), Vol 107, No 4: S82.

14. **Seshi B, Kumar S, King D (2001).** Mesenchymal progenitor cells (MPC) isolated from Dexter-type human bone marrow stromal cell cultures support engraftment of human hematopoietic cells in C.B-17 SCID mice and prolong their survival by possibly abrogating GVHD. *The Mesenchymal and Nonhematopoietic Stem Cells, Recent Progress and Current Controversies Meeting*, March 22-24, 2001 - New Orleans, Louisiana, *Cytotherapy Vol. 3 No 5, 2001, p. 423.*
15. **Seshi B, King D, Kumar S and Jackson KW (2001).** Proteome Analysis of Human Bone Marrow Stromal Cells. *The 2001 Annual Meeting of the American Society of Hematology (ASH)*, Orlando, Florida, *BLOOD*, Vol. 98 No 11, November 16, 2001, Publication Number: 361.
16. **Seshi B, Kumar S and King D (2001).** Leukemia-Associated Bone Marrow Mesenchymal Progenitor Cells Are Functionally Defective as Evidenced by Oligonucleotide Microarray Analysis. *The 2001 Annual Meeting of the American Society of Hematology (ASH)*, Orlando, Florida, *BLOOD*, Vol. 98 No 11, November 16, 2001, Publication Number: 363.
17. **Seshi B, Kumar S and King D (2001).** Evidence That Cotransplantation of Purified Human Bone Marrow Mesenchymal Progenitor Cells Supports Engraftment of Human T and B Lymphocytes in SCID Mice, Minimizes Graft Vs. Host Disease (GVHD), and Prolongs Their Survival. *The 2001 Annual Meeting of the American Society of Hematology (ASH)*, Orlando, Florida, *BLOOD*, Vol. 98 No 11, November 16, 2001, Publication Number: 2738.
18. **Seshi B, Kumar S and King D (2001).** Defining the Dexter-Type Human Bone Marrow Culture System Using cDNA Microarray Analysis. *The 2001 Annual Meeting of the American Society of Hematology (ASH)*, Orlando, Florida, *BLOOD*, Vol. 98 No 11, November 16, 2001, Publication Number: 4255.
19. **Seshi B, King D and Kumar S (2001).** Dissecting the IGF/ IGFBP System in Human Bone Marrow Stromal Cells. *The 2001 Annual Meeting of the American Society of Hematology (ASH)*, Orlando, Florida, *BLOOD*, Vol. 98 No 11, November 16, 2001, Publication Number: 4256.
20. **Seshi B, Kumar S and King D (2001).** Common Progenitor for Nonhematopoietic Mesenchymal Cells and Bone Marrow Derived (B) Lymphocytes as Evidenced by Single-Cell Microarray Analysis of Isolated Bone Marrow Stromal Cells. Presented at the 44th American Society of Hematology Annual Meeting on December 9, 2002, Philadelphia, Pennsylvania. *BLOOD* Volume 100 Number 11 November 16, 2002. Publication Number: 226